WHAT IS CLAIMED IS:

- 1. A steel sheet for a magnetic shield comprising less than 0.005 % by weight of C and 0.0003 to 0.01 % by weight of B, and having a thickness of 0.05 to 0.5 mm and an anhysteresis magnetic permeability of 7500 or more.
- 2. The steel sheet according to claim 1, further comprising one or more elements selected from the group consisting of Ti, Nb, and V, the total amount of which is 0.08 % by weight or less.
- 3. A method of producing a magnetic shielding steel sheet of claim 1 comprising:
- (a) hot-rolling a steel slab containing less than 0.005 % by weight of C and 0.0003 to 0.01 % by weight of B to form a hot-rolled steel sheet;
 - (b) cold-rolling the hot-rolled steel sheet from step (a);
- (c) annealing the resulting cold-rolled steel sheet from step (b); and
- (d) optionally skin-pass rolling the steel sheet from step(c) at a reduction of 1.5 % or less.

- 4. A method of producing a magnetic shielding steel sheet of claim 2 comprising:
- (a) hot-rolling a steel slab containing less than 0.005% by weight of C, 0.0003 to 0.01 % by weight of B and one or more elements selected from the group consisting of Ti, Nb, and V, the total amount of which is 0.08 % by weight or less to form a hot-rolled steel sheet;
 - (b) cold-rolling the hot-rolled steel sheet from step (a);
- (c) annealing the resultant cold-rolled steel sheet from step (b); and
- (d) optionally skin-pass rolling the steel sheet from step(c) at a reduction of 1.5 % or less.
- 5. A steel sheet for a magnetic shield comprising less than 0.005 % by weight of C and one or more elements selected from the group consisting of Ti, Nb, and V, the total amount of which is 0.08 % by weight or less, and having a thickness of 0.05 to 0.5 mm and an anhysteresis magnetic permeability of 7500 or more.
- 6. A method of producing a magnetic shielding steel sheet of claim 5 comprising:
- (a) hot-rolling a steel slab containing less than 0.005% by weight of C and one or more elements selected from the group

consisting of Ti, Nb, and V, the total amount of which is 0.08 % by weight or less to form a hot-rolled steel sheet;

- (b) cold-rolling the hot-rolled steel sheet from step (a);
- (c) annealing the resultant cold-rolled steel sheet from step (b); and
- (d) optionally skin-pass rolling the steel sheet from step(c) at a reduction of 1.5 % or less.